

**Amendments to the Specification:**

Please amend the paragraph beginning at page 9, line 16 with the following amended paragraph:

“In Figure 2, stent 30 is comprised of a plurality of circumferential expansion members 12 and a plurality of interconnecting members 14. Each of the plurality of interconnecting members 14 joins adjacent pairs of circumferential expansion members 12 [[14]]. Each interconnecting member 14 forms a junction with a strut 16 of each of the adjacent circumferential expansion members 12 and intersects the strut 16 at approximately a mid-point along the length of each strut 16. The plurality of interconnecting members 14 form groupings 14a, 14b, 14c, 14d, 14e and 14f along the longitudinal axis L' of the stent 30. Because the interconnecting members 14 lie in the folding planes of the peaks 12p and troughs 12t and struts 16 about angle  $\alpha$ , it has been found desirable to offset each of the interconnecting members 14 from ~~the~~ a line parallel to the longitudinal axis L' of the stent 30 by an angle  $\beta$  in order to enhance the folding properties of the circumferential expansion members 12 from a larger diameter to a smaller diameter of the stent 30. In stent 30, each of the plurality of interconnecting members 14 in groupings 14a-14f have the same offset angle  $\beta$  and all of the plurality of interconnecting members 14 are parallel to each other. In order to accommodate the offset angle  $\beta$ , and provide for folding of the interconnecting members 14 during compression of the stent 30 from its larger diameter to its smaller diameter, the strain relief sections 18 and 20 at terminal ends of each interconnecting member 14 have opposing orientations. Thus, when stent 30 is viewed in its tubular configuration from a proximal end view P, first strain relief section 18 has a generally C-shaped configuration that has a right-handed or clockwise orientation, while the second strain relief section 20, also having a generally C-shaped configuration has a generally left-handed or counterclockwise orientation.”

Please amend the paragraph beginning at page 10, line 8 with the following amended paragraph:

“In accordance with the preferred embodiment for stent 30, it has been found desirable to employ a 2:1 ratio of peaks 12p or troughs 12t to interconnecting members. Thus, as depicted, there are six peaks 12p and six ~~troughs~~ ~~peaks~~ 12t in each of the plurality of circumferential expansion elements 12 and three interconnecting members 14 interconnect each pair of adjacent circumferential expansion elements 12. Similarly, between adjacent pairs of circumferential expansion elements 12, the interconnecting members 14 are circumferentially offset one peak 12p and one trough 12t from the interconnecting members 14 in an adjacent pair of circumferential expansion elements 12. Thus, interconnecting elements in groups 14a, 14c and 14e interconnect circumferential expansion element pairs 12a-12b, 12c-12d, 12e-12f, 12g-12h and 12i-12j, interconnecting elements in groups 14b, 14d and 14f interconnect circumferential expansion element pairs 12b-12c, 12d-12e[[f]], 12f-12g, 12h[[g]]-12i[[h]]. With the interconnecting elements in group 14a, 14c and 14e each being offset by one peak 12p and one trough 12t along the circumferential axis of each circumferential expansion element 12.”

Please amend the paragraph beginning at page 10, line 22 with the following amended paragraph:

“Turning to Figure 3, stent 40 is illustrated and has a substantially identical configuration of circumferential expansion elements 12 and interconnecting elements 14, except that instead of employing a 2:1 ratio of peaks 12p or trough[[']]s 12t to interconnecting elements, stent 40 employs a 3:1 ratio, such that each circumferential expansion element 12a-12i has six peaks 12p and six troughs 12t, but adjacent pairs of circumferential elements 12 are interconnected by only two interconnecting elements 14. Like stent 30, the interconnecting elements of a first circumferential expansion element pair are circumferentially offset from the interconnecting elements of a second adjacent circumferential expansion element pair, except in stent 40, the offset is either one peak 12p and two troughs 12t or two peaks 12p and one trough 12t. In stent 40 there are four groups of interconnecting elements 14a, 14b, 14 c and 14d that interconnect the plurality of circumferential expansion elements 12. Interconnecting element groups 14a and 14c

interconnects circumferential expansion element pairs 12b-12c, 12d-12e, 12f-12g and 12h-12i, and interconnecting element groups 14b and 14d interconnect circumferential expansion element pairs 12a-12b, 12c-12d, 12e-12f and 12g-12h.”

Please amend the paragraph beginning at page 11, line 19 with the following amended paragraph:

“Turning now to Figure 4 in which stent 50 is depicted. Like stents 30 and 40 described above, stent 50 shares the common elements of circumferential expansion elements 12, having a plurality of peaks 12p and troughs 12t interconnecting a plurality of struts 16, and U-shaped sections 22, and interconnecting elements 14. In stent 50, however, the plurality of interconnecting elements 14 form two groups of interconnecting elements 14a and interconnecting elements 14b. Each of the individual interconnecting elements 14 in interconnecting element groups 14a and 14b are also angularly offset from the longitudinal axis L' of the stent 50 by angle  $\beta$ . Moreover, within each pair of adjacent circumferential expansion elements 12, the interconnecting element groups 14a and 14b are circumferentially offset from each other by three peaks 12p and three troughs 12t. Within each group of interconnecting elements 14a and 14b, however, each of the plurality of individual interconnecting elements 14 are generally aligned along a common longitudinal axis. In this manner, with the exception of the most proximal 12a and the most distal 12i[[b]] circumferential ring elements, each of the plurality of interconnecting elements form a substantially four-point junction 19 at approximately a mid-point a strut 16 on each of circumferential expansion elements 12b-12h. The substantially four-point junction 19 is formed between a distal strain relief section 20 of one interconnecting member with a proximal side of a strut 16 and a proximal strain relief section 18 of an adjacent interconnecting element 14 with a distal side of the same strut 16.”

Please amend the paragraph beginning at page 12, line 8 with the following amended paragraph:

“Finally, turning to Figure 5, there is illustrated stent 60 which, like stents 30, 40 and 50 is comprised of a plurality of circumferential expansion elements 12 and

interconnecting elements 14 that interconnect adjacent pairs of circumferential expansion elements 12. Like stent 40 of Figure 3, stent 60 has groupings of interconnecting elements 14 into interconnecting element groups 14a, 14b, 14c and 14d. In stent 60, however, interconnecting element groups 14a and 14d interconnect identical pairs of circumferential expansion elements 12 and interconnecting element groups 14b and 14c interconnect identical pairs of circumferential expansion elements 12. Each of the interconnecting elements in interconnecting element groups 14b[[a]] and 14d are angularly offset from the longitudinal axis L' of the stent 60 by an angle  $\beta^-$  and are parallel to one and other. Similarly, each of the interconnecting elements in interconnecting element groups 14a[[b]] and 14c are angularly offset from the longitudinal axis L' of the stent 60 by an ~~and~~ angle  $\beta^+$  and are parallel to one and other."

Please amend the paragraph beginning at page 12, line 21 with the following amended paragraph:

"For each adjacent pair of circumferential expansion elements 12, the interconnecting elements 14 have different orientations of angular offset from the longitudinal axis L' of the stent 50. For example, for circumferential expansion element pair 12a-12b, the interconnecting elements of group 14b and group 14c are offset by angle  $\beta^-$  [[ $\beta^+$ ]] and by angle  $\beta^+$  [[ $\beta^-$ ]], respectively. In the adjacent circumferential expansion element pair 12b-12c, the interconnecting elements of group 14a and 14d are offset by angle  $\beta^+$  [[ $\beta^-$ ]] and by angle  $\beta^-$  [[ $\beta^+$ ]], respectively. Thus, between adjacent pairs of circumferential elements 12, the interconnecting elements are out of phase, in that they have different angular orientations of angle  $\beta$ . Additionally, between adjacent pairs of circumferential elements 12, the interconnecting elements are circumferentially offset by a single peak 12p, with interconnecting element group 14a being circumferentially offset from interconnecting element group by a single peak 12p, and interconnecting element group 14c being circumferentially offset from interconnecting element group 14d by a single peak 12p. Furthermore, there are different circumferential offsets between interconnecting element group pairs 14b-14c and 14a-14d within individual pairs of adjacent circumferential expansion elements 12. The circumferential

offset between interconnecting element group pair 14b-14c is two peaks 12p and three troughs 12t, while the circumferential offset between interconnecting element group pair 14a-14d is four peaks 12p and three troughs 12t.”

Please amend the paragraph beginning at page 13, line 10 with the following amended paragraph:

“Those skilled in the art will appreciate that the foregoing embodiment of stents 10 [[1]], 20, 30, 40 and 50 describe various geometries all comprised of common structural elements, namely, circumferential expansion elements 12 having a plurality of peaks 12p and troughs 12t and struts 16 [[15]] interconnected by hinge elements 22. Furthermore, those skilled in the art will understand that variations on the number of and positioning of the interconnecting members 14 between adjacent pairs of circumferential expansion elements 12 and along the circumferential axis of the stent are also contemplated by the present invention and that the specific embodiments illustrated and described with reference to the figures is exemplary in nature.”

Please amend the paragraph beginning at page 14, line 4 with the following amended paragraph:

“Figure 8 depicts stent 40 radially expanding as it the constraining sheath is being withdrawn from the stent 40. Figure 9 depicts stent 40 in virtually its fully radially expanded enlarged diameter, with just a proximal section of the stent 40 be constrained in the constraining sheath (not pictured). Figure 6 is an enlarged section of the stent 40 illustrating the mid-strut connection between the circumferential expansion element 12 and the interconnecting element 14 at the proximal and distal strain relief sections 18 and 20, and clearly showing the generally U-shaped hinge elements 22, [[a]] the peaks 12p and troughs 12t of each circumferential expansion element 12. Figure 6 also clearly depicts the differences in the widths  $W_t$  of the proximal and distal strain relief sections and the width  $W_i$  of the body of the interconnecting member 14, as well as the difference between the width  $W_h$  of the U-shaped hinge element 22 and the width  $W_s$  of the strut 16.”

Please amend the paragraph beginning at page 17, line 1 with the following amended paragraph:

“During deposition, the chamber pressure, the deposition pressure and the partial pressure of the process gases are controlled to optimize deposition of the desired species onto the substrate. As is known in the microelectronic fabrication, nano-fabrication and vacuum coating arts, both the reactive and non-reactive gases are controlled and the inert or non-reactive gaseous species introduced into the deposition chamber are typically argon and nitrogen. The substrate may be either stationary or moveable, either rotated about its longitudinal axis, or moved in an X-Y plane within the reactor to facilitate deposition or patterning of the deposited material onto the substrate. The deposited material may be [[maybe]] deposited either as a uniform solid film onto the substrate, or patterned by (a) imparting either a positive or negative pattern onto the substrate, such as by etching or photolithography techniques applied to the substrate surface to create a positive or negative image of the desired pattern or (b) using a mask or set of masks which are either stationary or moveable relative to the substrate to define the pattern applied to the substrate. Patterning may be employed to achieve complex finished geometries of the resultant stent, both in the context of spatial orientation of the pattern as well as the material thickness at different regions of the deposited film, such as by varying the wall thickness of the material over its length to thicken sections at proximal and distal ends of the stent to prevent flaring of the stent ends upon radial expansion of the stent.”